

**DRAFT REPORT**

**ECONOMIC ANALYSIS  
OF CRITICAL HABITAT DESIGNATION  
FOR THE ZAYANTE BAND-WINGED GRASSHOPPER**

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## PREFACE

1. This report was prepared for the U.S. Fish and Wildlife Service (Service) by Bioeconomics, Incorporated, under subcontract to Industrial Economics, Incorporated to assess the economic impacts that may result from designation of critical habitat for the Zayante band-winged grasshopper. Under section 4 (b)(1) of the 1973 Endangered Species Act (Act), the decision to list a species as endangered or threatened is made solely on the basis of the best scientific and commercial data and analysis. By contrast, section 4 (b)(2) of the Act states that the decision to designate critical habitat must take into account the potential economic impact of specifying a particular area as critical habitat. As such, this report does not address any economic impacts associated with the listing of the species. The analysis only addresses those incremental economic costs and benefits potentially resulting from the designation of critical habitat.
2. Bioeconomics, Inc. worked closely with the Service personnel to ensure that potential Federal nexuses as well as current and future land uses were appropriately identified, and to begin assessing whether or not the designation of critical habitat would have any net economic effect in the region containing the proposed critical habitat designations. Identification of these land use/Federal-agency actions provided Bioeconomics with a basis for evaluating the incremental economic impacts due to critical habitat designation for the grasshopper.
3. Section 7 of the Act authorizes the Service to consider, and where appropriate, make a determination that a Federal-agency action is likely to jeopardize the continued existence of a species or result in the destruction or adverse modification of critical habitat. Bioeconomics, therefore, also requested input from the Service officials concerning whether or not any of these projects would likely result in *an adverse modification determination without an accompanying jeopardy opinion*. It is important to note here that it would not have been appropriate for Bioeconomics to make such policy determinations.
4. To better understand the concerns of stakeholders, Bioeconomics reviewed the public comments submitted in response to the *Proposed Designation of Critical Habitat for the Zayante Band-winged Grasshopper* (65 FR 41917) to assess potential economic affects of the critical habitat designation on private lands. This report uses this information to present an initial characterization of possible economic impacts associated with the designation of critical habitat for the Zayante band-winged grasshopper.
5. Our final analysis will provide, to the extent possible, more rigorous estimates of expected economic impacts. Thus, we solicit information that can be used to support such assessment, whether associated with the categories of impact highlighted in this report, or other economic effects of the critical habitat designation. Since the focus of this report is an assessment of incremental impacts of proposed critical habitat, we request information on the potential effects of the designation on current and future land uses, rather than on effects associated with the listing of the Zayante band-winged grasshopper, or of other State, or local requirements that influence land use.

## EXECUTIVE SUMMARY

6. The purpose of this report is to identify and analyze the potential economic impacts that would result from the proposed critical habitat designation for the Zayante band-winged grasshopper (*Trimerotropis infantilis*). This report was initially prepared by Bioeconomics, Inc., under subcontract to Industrial Economics, Incorporated, for the U.S. Fish and Wildlife Service's Division of Economics.
7. Section 4(b)(2) of the Endangered Species Act (Act) requires the Service to base critical habitat proposals upon the best scientific and commercial data available, after taking into consideration the economic impact, and any other relevant impact, of specifying any particular area as critical habitat. The Service may exclude areas from critical habitat designation when the benefits of exclusion outweigh the benefits of including the areas within critical habitat, provided the exclusion will not result in extinction of the species.

### **Proposed Critical Habitat**

8. The Service has proposed designation of critical habitat within an approximately 4,230 hectare (10,560 acre) area for the Zayante band-winged grasshopper in Santa Cruz County, California. The proposed critical habitat is contained within one unit. Almost all of the proposed critical habitat is privately owned: according to the Service, 94.2% of the area is under private ownership, and the remaining 5.8% consists of State or local land.

### **Framework and Economic Impacts Considered**

9. This analysis defines an impact of critical habitat designation to include any effect the critical habitat designation has above and beyond the impacts associated with the listing of the grasshopper. Section 9 of the Act makes it illegal for any person to "take" a listed species, which is defined by the Act to mean harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or the attempt to engage in any such conduct.<sup>1</sup> To evaluate the incremental economic impacts attributable to the critical habitat designation for the grasshopper, above and beyond the Act listing, the following analysis assumes a "without critical habitat" baseline and compares it to a "with critical habitat" scenario. The difference between the two is a measurement of the net change in economic activity that may result from the designation of critical habitat for the grasshopper.
10. The "without critical habitat" baseline represents current and expected economic activity

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<sup>1</sup> 15 U.S.C. 1531 et seq.

under all existing modifications prior to critical habitat designation. These include the take restrictions that result from the Act listing for the grasshopper (and listings for other relevant species), as well as other Federal, State, and local requirements that may limit economic activities in the regions containing the proposed critical habitat units. This analysis focuses on potential costs and benefits of critical habitat for the grasshopper, above and beyond any costs or benefits already in existence due to the listing of the grasshopper and other species found within the grasshopper's proposed critical habitat.

11. To estimate the incremental costs and benefits that critical habitat designation would have on existing and planned activities and land uses, the following framework was applied:

1. Develop a comprehensive list of possible Federal nexuses on Federal, State, county, municipal, and private lands in and around the proposed critical habitat area.
2. Review historical patterns and current information describing the section 7 consultations in the proposed critical habitat area to evaluate the likelihood that nexuses would result in consultations with the Service.
3. Determine whether specific projects and activities within the proposed critical habitat involve a Federal nexus and would likely result in section 7 consultations.
4. Evaluate whether section 7 consultations with the Service would likely result in any modifications to projects, activities, or land uses.

12. Using the framework outlined above, this analysis evaluates potential costs and benefits associated with the proposed designation of critical habitat. Three primary categories of potential incremental costs are considered in the analysis. These categories include:

- C Costs associated with conducting re-initiations or extensions of existing section 7 consultations occurring under the listing, or the with incremental effort associated with new consultations (e.g., administrative effort).
- C Costs associated with uncertainty and public perceptions resulting from the designation of critical habitat. Uncertainty and public perceptions about the likely effects of critical habitat that may cause project delays and changes in property values, regardless of whether critical habitat actually generates incremental impacts.
- C Costs associated with any modifications to projects, activities, or land uses resulting from the outcome of section 7 consultation with the Service.

13. Potential economic benefits considered in this analysis include use and non-use values. Non-use benefits associated with designation of critical habitat may include resource preservation or enhancement in the form of biodiversity, ecosystem health, and intrinsic (passive use) values.<sup>2</sup> Use benefits associated with the proposed designation could include enhancement of recreational opportunities such as wildlife viewing. Finally, the public's perception of the potential importance of critical habitat may result in increases to property values, just as the perception of modifications may result in property value reductions, regardless of whether critical habitat generates such impacts.

### **Preliminary Results**

- C Few incremental consultations or other costs due to proposed critical habitat are expected to occur above and beyond those associated with the listing for the grasshopper. The two supporting factors are:
- i. Almost all lands included in the proposed critical habitat for the grasshopper are privately held. No evident Federal nexuses exist for many of these properties, so activities and projects on these lands will be unaffected by critical habitat.
  - ii. The lands included within the proposed critical habitat for the grasshopper have both a high degree of current development, and a relatively high level of current land-use regulation. The low potential for extensive new development along with existing land-use regulations may minimize or preclude most incremental impacts associated with the proposed designation of critical habitat for the grasshopper.
- C Reconstruction or widening of existing county roads within the proposed habitat constitute the foreseeable activities most likely to result in incremental section 7 consultations with the Service. However, the Service expects that there will be few, if any, additional modifications to projects or activities required due to the designation of critical habitat.

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<sup>2</sup> Intrinsic values, also referred to as passive use values, include categories of economic benefits such as existence value, i.e., knowledge of continued existence of a resource or species; and bequest value, i.e., preserving the resource or species for future generations.

Exhibit ES-1 summarizes these preliminary findings.

| <b>Exhibit ES-1</b>  |   |   |  |
|--|---|---|--|
| <b>SUMMARY OF POTENTIAL CONSULTATIONS AND IMPACTS WITHIN PROPOSED CRITICAL HABITAT FOR THE ZAYANTE BAND-WINGED GRASSHOPPER</b>   |   |   |  |
| <b>Federal Agency</b>  | <b>Current or Future Activities that May Require Consultation</b>         | <b>Potential for New or Re-Initiated Consultations or Other Impacts</b> | <b>Potential Modifications As a Result of Consultation</b> |
| Federal Highway Administration   | Funding associated with widening county roads within the proposed habitat | Moderate to High  | None to Low  |
| Federal Housing Administration   | Funding for construction or maintenance of homes                          | Low   | None to Low  |
| Sources: Information in table based on personal communication with biologists and consultation specialists, Ventura, CA Office, U.S. Fish and Wildlife Service. All communication conducted in September 2000. |   |   |  |

## INTRODUCTION

## SECTION 1

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14. On January 4, 1997, following a review of information and public comments received on the proposed rule, the U.S. Department of the Interior's Fish and Wildlife Service (Service) listed the Zayante Band-winged grasshopper (*Trimerotropis infantilis*) along with the Mount Hermon June beetle (*Polyphylla barbata*) both occurring within the Zayante sandhills habitat as endangered species (62 FR 3616). At the time of the listing, the Service found that designation of critical habitat for the Zayante band-winged grasshopper was not prudent because such designation would not benefit the species since all known populations of the species occur on non-Federal lands where Federal involvement in land-use activities would not generally occur. The Service reconsidered the question of critical habitat as part of a settlement order in April 2000, in Southwest Center for Biological Diversity v. Bruce Babbitt, et al. CIV99-1003 MMC. Upon further consideration, the Service decided there may be some benefit to designation of critical habitat for the Zayante band-winged grasshopper, and proposed critical habitat for the grasshopper on July 7, 2000.
15. Under section 4(b)(2) of the Endangered Species Act of 1973, as amended (Act), the Service is required to consider designation of critical habitat for all species listed as endangered or threatened. Critical habitat refers to a geographic area(s) that is essential for the conservation of a threatened or endangered species and that may require special management and protection. Critical habitat designation can help focus conservation activities for a listed species by identifying areas that are essential. Critical habitat designation contributes to Federal land management agencies' and the public's awareness of the importance of these areas.
16. In addition to its informational role, the designation of critical habitat may provide protection where significant threats have been identified. This protection derives from section 7 of the Act, which requires Federal agencies to consult with the Service in order to ensure that activities they fund, authorize, or carry out are not likely to result in destruction or adverse modification of critical habitat. Under the listing of a species and designation of critical habitat, Federal agencies must consult with the Service regarding any activities that may affect a listed species or its critical habitat. The Service renders the jeopardy and adverse modification opinion. The Act's regulations define jeopardy as any action that would appreciably reduce the likelihood of both the survival and recovery

of the species. Adverse modification of critical habitat is defined as any direct or indirect alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of the species.

17. The designation of critical habitat affects lands both occupied and unoccupied by the species. The Act defines occupied critical habitat as areas that contain the physical or biological features that are essential to the conservation of the species and that may require special management considerations or protection. Unoccupied critical habitat includes those areas that fall outside the geographical area occupied by the species, but that may meet the definition of critical habitat upon determination that they are essential for the conservation of the species. Federal agencies will have to consult with the Service regarding any activities they fund, authorize, or carry out on both occupied and unoccupied land that may affect critical habitat. Already, they must consult with the Service on activities in these areas that may affect the grasshopper.

#### **CONSULTATION UNDER SECTION 7 OF THE ENDANGERED SPECIES ACT**

18. Section 7(a)(2) of the Act requires Federal agencies to consult with the Service whenever activities they fund, authorize, or carry out may affect listed species or designated critical habitat. Section 7 consultation with the Service is designed to ensure that any current or future Federal actions do not appreciably diminish the value of the critical habitat for the survival and recovery of the species. Activities on land owned by individuals, organizations, states, local and Tribal governments only require consultation with the Service if their actions require a Federal permit, license, or other authorization; or involve Federal funding. Federal actions not affecting the species or its critical habitat, as well as actions on non-Federal lands that are not federally funded, authorized, or permitted, will not require section 7 consultation.
19. For consultations concerning activities on Federal lands, the relevant Federal agency consults with the Service. For consultations where the consultation involves an activity proposed by a State or local government or a private entity (the "applicant"), the Federal agency with the nexus to the activity (the "Action agency") serves as the liaison with the Service. The consultation process may involve both informal and formal consultation with the Service.
20. Informal section 7 consultation is designed to assist the Federal agency and any applicant in identifying and resolving potential conflicts at an early stage in the planning process (50 CFR 402.13). Informal consultation consists of informal discussions between the Service and the agency concerning an action that may affect a listed species or its designated critical habitat. During the informal consultation, the Service makes advisory recommendations on ways to minimize or avoid adverse

effects.<sup>3</sup> Informal consultation may be initiated via a phone call or letter from the Action agency, or a meeting between the Action agency and the Service.

21. A formal consultation is required if the proposed action is likely to adversely affect listed species or designated critical habitat in ways that cannot be avoided through informal consultation (50 CFR 402.14). Formal consultations determine whether a proposed agency action is likely to jeopardize the continued existence of a listed species or destroy or adversely modify critical habitat. Determination of whether an activity will result in jeopardy to a species or adverse modification of its critical habitat is dependent on a number of variables, including type of project, size, location, and duration. If the Service finds, in its biological opinion, that a proposed agency action is likely to jeopardize the continued existence of a listed species and/or destroy or adversely modify the critical habitat, the Service may identify reasonable and prudent alternatives that are designed to avoid jeopardy and/or adverse modification to the listed species and/or critical habitat.
22. Reasonable and prudent alternatives are defined at 50 CFR 402.02 as alternative actions that can be implemented in a manner consistent with the intended purpose of the action, that are consistent with the scope of the Federal agency's legal authority and jurisdiction, that are economically and technologically feasible, and that the Service believes would avoid jeopardizing the species or destruction or adverse modification of critical habitat. Reasonable and prudent alternatives can vary from slight project modifications to extensive redesign or relocation of the project. Costs associated with implementing reasonable and prudent alternatives vary accordingly.
23. Federal agencies are also required to evaluate their actions with respect to any species that is proposed as endangered or threatened and with respect to its proposed critical habitat. Regulations implementing the interagency cooperation provisions of the Act are codified at 50 CFR part 402. Section 7(a)(4) of the Act and regulations at 50 CFR 402.10 require Federal agencies to confer with the Service on any action that is likely to jeopardize the continued existence of a proposed species or to result in destruction or adverse modification of proposed critical habitat.

## **PURPOSE AND APPROACH OF ECONOMIC ASSESSMENT**

24. Under the regulations promulgated pursuant to the Act, the Service is required to make its decision concerning critical habitat designation on the basis of the best scientific and commercial data available and to consider economic and other relevant impacts of designating a particular area as critical habitat. The Service may exclude areas from critical habitat upon a determination that the benefits of such exclusions outweigh the benefits of specifying such areas as critical habitat. The purpose of this report is to identify and analyze the potential economic costs and benefits that could

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<sup>3</sup> Many applicants incur costs to prepare analyses as part of the consultation package. These costs vary greatly depending on the specifics of the project. In most cases, these costs are attributable to the fact that a species has been added to the list of threatened and endangered species rather than the designation of critical habitat.

result from the proposed critical habitat designation for the Zayante band-winged grasshopper.

25. The analysis must distinguish between economic impacts caused by the listing of the grasshopper under the Act and those additional effects that would be caused by the proposed critical habitat designation. *The analysis only evaluates economic impacts resulting from critical habitat designation that are above and beyond impacts caused by the Act listing of the grasshopper.* In the event that a land use or activity would be limited or prohibited by another existing statute, regulation, or policy, the economic impacts associated with those limitations or prohibitions would not be attributable to critical habitat designation.
26. This analysis assesses how critical habitat designation for the grasshopper may affect current and planned land uses and activities on state, county, local and private land. For federally managed land, the Service, in its biological opinion, may find that land uses, activities, and other actions are likely to adversely modify critical habitat. Through a reasonable and prudent alternative in the biological opinion, the Service can recommend that the federal agency change this activity. The action agency can then follow the reasonable and prudent alternative, ignore the biological opinion, or apply for an exemption from the Act. For non-Federal lands (i.e., state, county, local, and private land) analysis of the effects of an action on critical habitat will only occur when a Federal nexus exists.(i.e., the activities or land uses of concern involve Federal permits, Federal funding, or other Federal actions). Activities on State and private land that do not involve a Federal nexus are not restricted by critical habitat designation.
27. To be considered in the economic analysis, activities should be reasonably foreseeable, which this analysis defines as activities that are currently authorized, permitted, or funded, or for which proposed plans are currently available to the public. This analysis considers all reasonably foreseeable activities on both occupied and unoccupied lands. Current and future activities that could potentially result in section 7 consultations are considered.

## **STRUCTURE OF REPORT**

28. The remainder of the report is organized as follows:

- C **Section 2: Species Description and Relevant Baseline Information** - Provides general information on the species, a brief description of the proposed critical habitat units, and regulatory and socio-economic information describing the baseline, that is, the "without critical habitat" scenario.
  
- C **Section 3: Analytic Framework and Results** - Describes the framework and methodology for the analysis, and provides preliminary findings of potential incremental costs and benefits resulting from the proposed designation.

**SPECIES DESCRIPTION AND  
RELEVANT BASELINE INFORMATION<sup>4</sup>**

**SECTION 2**

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**DESCRIPTION OF SPECIES**

29. The Zayante band-winged grasshopper (*Trimerotropis infantilis*) was first described from near Mount Hermon in the Santa Cruz Mountains, Santa Cruz County, California, in 1984. The body and forewings of the grasshopper are pale grey to light brown with dark cross bands on the forewings. The basal area of the hindwings is pale yellow with a faint thin band. The lower legs are blue, and the eyes have bands around them. Specimens range in size from 13.7 to 21.6 mm with females being significantly larger than males.
30. The Zayante band-winged grasshopper occurs in association only with the Zayante series soils in the vicinity of the communities of Ben Lomond, Felton, Mount Hermon, Zayante and Scotts Valley. These sands harbor a complex mosaic of vegetation dominated by maritime coast range ponderosa pine forest and northern maritime chaparral (Griffin 1964; Holland 1986). The distributions of these two vegetative communities overlap to form a complex and intergrading mosaic of communities variously referred to as ponderosa sand parkland, ponderosa pine sand hills, and silver-leafed manzanita mixed chaparral.
31. Considering the localized distribution of the grasshopper from recent surveys as well as from historical specimens, the Service has determined several primary constituent elements for the Zayante band-winged grasshopper. These primary constituent elements are:

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<sup>4</sup> The information on the Zayante Band-winged grasshopper and its habitat included in this section was obtained from the *Proposed Designation of Critical Habitat for the Zayante Band-winged Grasshopper*, July 7, 2000 (65 FR 41917).

- C The presence of Zayante soils;
- C The occurrence of Zayante sand hills habitat and the associated plant species; and
- C Certain microhabitat conditions, including areas that receive large amounts of sunlight, widely scattered tree and shrub cover, bare or sparsely vegetated ground, and loose sand.

32. The primary constituent elements that are listed above occur within the area that the Service has proposed for designation as critical habitat.

**PROPOSED CRITICAL HABITAT UNITS**

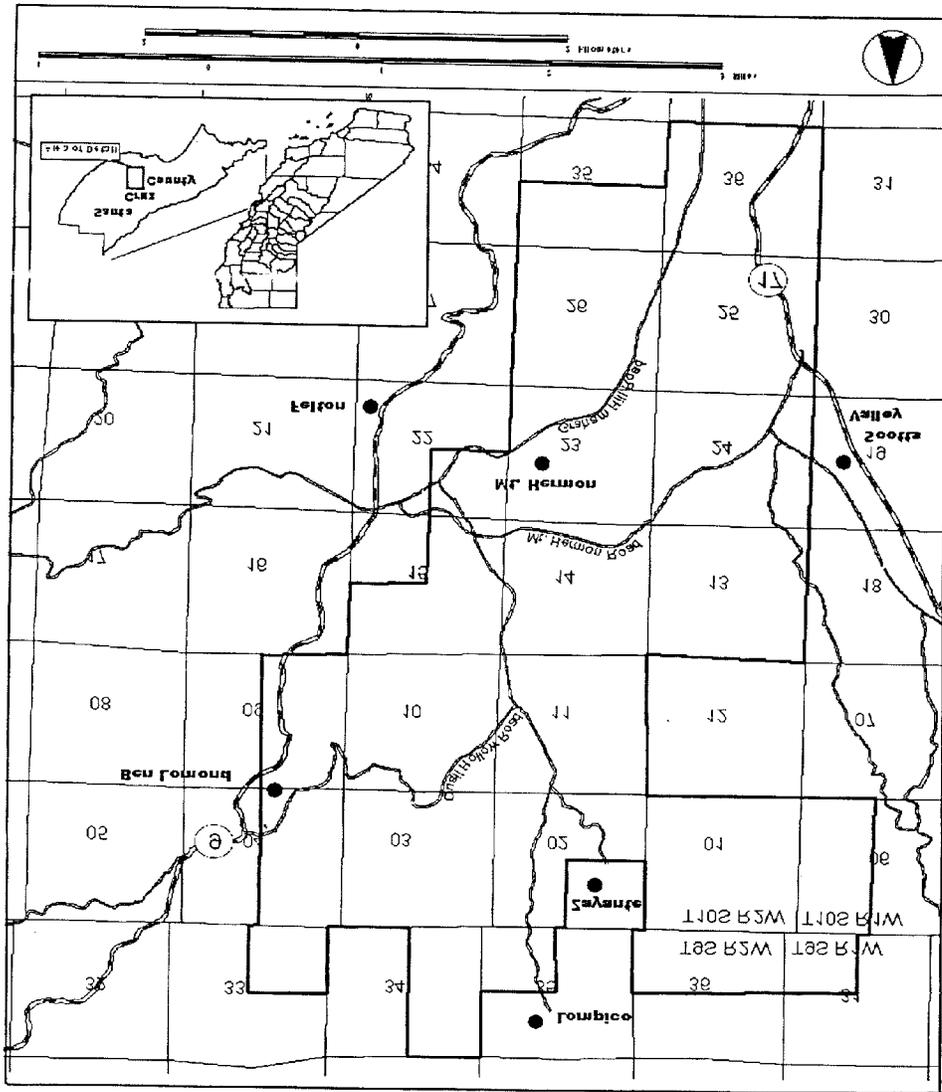
33. Exhibit 2-1 shows the critical habitat unit as currently proposed by the Service. The proposed designation encompasses approximately 10,560 acres (4,230 ha) of Santa Cruz County, California. The areas selected incorporate 100 percent of the currently known populations of the Zayante band-winged grasshopper. The proposed critical habitat unit lies between Highways 9 and 17. Most of the lands designated as critical occur from the southeastern portion of Henry Cowell Redwoods State Park west to the City of Scotts Valley and north to the communities of Ben Lomond, Lompico, and Zayante. A small area proposed for critical habitat is located east of Zayante in the vicinity of Weston Road. Exhibit 2-1 describes the distribution of land ownership within the proposed unit.

| <b>Exhibit 2-1</b>   |                     |                         |                        |                          |
|--|---------------------|-------------------------|------------------------|--------------------------|
| <b>APPROXIMATE AREA WITHIN SANTA CRUZ COUNTY ENCOMPASSING PROPOSED CRITICAL HABITAT IN HECTARES (HA) (ACRES(AC)) BY LAND OWNERSHIP</b> |                     |                         |                        |                          |
| <b>County</b>  | <b>Federal Land</b> | <b>Local/State Land</b> | <b>Private Land</b>    | <b>Total<sup>1</sup></b> |
| Santa Cruz   | -0-                 | 250 ha<br>(610 ac)      | 3,980 ha<br>(9,950 ac) | 4, 230 ha<br>(10,560 ac) |

Source: *Proposed Designation of Critical Habitat for the Zayante Band-winged Grasshopper*, July 7, 2000 (65 FR 41917).

34. The vast majority of the lands within the proposed unit are privately owned (94 percent). No Federal lands are included in the unit. Exhibit 2-2 shows a general area map of the extent and boundaries of the proposed critical habitat for the grasshopper.

### Exhibit 2-2 Proposed Zayante Band-winged Grasshopper Critical Habitat



## RELEVANT BASELINE INFORMATION

35. This section, provides information about regulations and requirements that exist in the baseline, i.e., the "without critical habitat" scenario. In addition, it provides information about the socio-economic characteristics of the region included in the critical habitat.

### Recovery Plan

36. An important component of the baseline scenario is the *Recovery Plan for Insect and Plant Taxa from the Santa Cruz Mountains in California* (Recovery Plan) published in 1998.<sup>5</sup> While this Recovery Plan imposes no binding restrictions on landowners and managers in the proposed critical habitat designation, it serves as an important information source for landowners regarding the life history, habitat requirements and recovery needs of the grasshopper.

### Baseline Statutory and Regulatory Requirements

37. The baseline requirements include regulations regarding the listing of the grasshopper and other species, and relevant State statutes and regulations.

### Listing

38. In January 1997, the Service listed the grasshopper as an endangered species. Under the listing, Federal agencies must consult with the Service regarding any actions they fund, authorize, or carry out that may affect a listed species or its critical habitat. The Service then renders the jeopardy and adverse modification opinion. The listing of the grasshopper is the most significant aspect of baseline protection, as it provides the most protections, since it makes it illegal for any person to "take" a listed species, which is defined by the Act to mean harass, harm, pursue, hurt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct.

### Overlap with Other Listed Species

39. In addition to the grasshopper listing, the Service staff at the Ventura Fish and Wildlife Office indicate that much or all of the proposed critical habitat for the grasshopper lies within habitat for the federally endangered Mount Hermon June beetle (*Polyphylla barbata*). The June beetle was listed at the same time as the grasshopper. Several other listed species are also found within the proposed

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<sup>5</sup>U.S. Fish and Wildlife Service. 1998. "Recovery Plan for Insect and Plant Taxa from the Santa Cruz Mountains in California." Region 1, U.S. Fish and Wildlife Service, Portland, Oregon. 83 pp.

unit, including the Ben Lomond spineflower (*Chorizanthe pungens* var. *hartwegiana*) and the Ben Lomond wallflower (*Erysimum teretifolium*).

40. As the proposed unit of critical habitat for the grasshopper lies within the known habitat of several other listed species, Service staff from the Ventura Fish and Wildlife Office report that most Federal activities in this area already require section 7 consultations. While designation of critical habitat for the grasshopper in these areas may not result in additional consultations, conducting section 7 consultations for two species simultaneously may result in incremental complexities.

### **State Statutes and Regulations**

41. Other relevant State statutes include the California Environmental Quality Act (CEQA) which requires identification of significant environmental effects of proposed projects that have the potential to harm the environment. The lead agency (typically the local agency in charge of the oversight of a project) must determine whether a proposed project would have a "significant" effect on the environment. Section 15065 of Article 5 of the CEQA regulations states that a finding of significance is mandatory if the project will "substantially reduce the habitat of a fish and wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of an endangered, rare or threatened species, or eliminate important examples of the major periods of California history or prehistory." If the lead agency finds a project may cause significant impacts, the landowners must prepare a Environmental Impact Report (EIR).<sup>6</sup> Review of the CEQA statute and conversations with the California Resources Agency (one of the agencies responsible for administering CEQA) revealed that designation of critical habitat alone does not require a lead agency to start a new EIR if critical habitat was designated after the initial EIR was released. The CEQA process would likely not change if a proposed project was located within occupied critical habitat because the presence of the species or its habitat would trigger analysis on the part of the lead CEQA agency. However, if a project is located within designated critical habitat that does not support the species or its habitat, the lead CEQA agency would likely address, at least briefly, the presence of critical habitat and note that the species and the primary consistent elements are not present. The cost associated with this brief analysis would likely be negligible.

### **Socioeconomic Profile of the Critical Habitat Area**

42. To provide context for the discussion of potential economic impacts due to proposed critical

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<sup>6</sup>California Resources Agency, "Summary and Overview of the California Environmental Quality Act", November 12, 1998, [http://ceres.ca.gov/topic/env\\_law/ceqa/summary.html](http://ceres.ca.gov/topic/env_law/ceqa/summary.html), August 23, 2000.

habitat, this section summarizes key economic and demographic information for Santa Cruz County, California. The entire proposed critical habitat for the grasshopper is contained within Santa Cruz County. The population center of Santa Cruz County is located approximately 30 miles west of Silicon Valley and 65 miles south of the San Francisco Bay Area.

43. Exhibit 2-3 summarizes key economic data for Santa Cruz County. In 1999, Santa Cruz County had a total population of 255,800. The 1999 civilian labor force in Santa Cruz County was 140,900 with an unemployment rate of 6.3 percent. This rate is slightly higher than the 1999 statewide rate of 5.2 percent. The percent of people living below the poverty level in the county was 13.3% in 1995 compared to 16.5% for the entire State of California.
44. The largest economic sector in Santa Cruz County is services accounting for 26.9 percent of total employment. The largest components of this sector are business services and health services. Other significant economic sectors in the county are retail trade (20.1%), government (18.1%), and manufacturing (10.5%).
45. While the unemployment rate in Santa Cruz County remains above the statewide average, labor market conditions in the county have been steadily improving over the past 5 years. The county has continued to record job growth and steadily declining unemployment rates over this period.
46. Exclusive of the government sector, the major industries within the county are information and knowledge based industries (such as computer hardware and software), tourism, and agriculture. Among the top 15 employers in the county are five associated with State or local government, five computer or technology firms, two hospitals, two agricultural products firms and one business in the recreation industry.

| <b>Exhibit 2-3</b>   |   |                                |
|--|---|--------------------------------|
| <b>SOCIOECONOMIC CHARACTERISTICS OF<br/>SANTA CRUZ COUNTY, CALIFORNIA</b>  |   |                                |
| Population of Santa Cruz County (1999)   | 245,201                                     |                                |
| Percent of State Population  | 0.7%  |                                |
| Percent Change in Population (1990-1999)   | 6.9%  |                                |
| Percent of Residents Living Below the Poverty Level (1995)   | 13.3%                                       |                                |
| Total Full and Part time Employment (1999)   | 140,900                                     |                                |
| Unemployment Rate (1999)   | 6.3%  |                                |
| <b>Industry</b>  | <b>Full/Part Time Employment<br/>(1997)</b> | <b>Percent of County Total</b> |
| Farming  | 10,193                                      | 7.3%                           |
| Agricultural Services  | 3,560                                       | 2.5%                           |
| Mining   | 163   | 0.1%                           |
| Construction   | 7,177                                       | 5.1%                           |
| Manufacturing  | 14,456                                      | 10.3%                          |
| Transportation/Utilities   | 4,038                                       | 2.9%                           |
| Wholesale Trade  | 5,169                                       | 3.7%                           |
| Retail Trade   | 24,965                                      | 17.8%                          |
| Finance/ Insurance/ Real Estate  | 8,758                                       | 6.2%                           |
| Services   | 44,375                                      | 31.7%                          |
| Government   | 17,247                                      | 12.3%                          |
| Sources: California Employment Development Department, Labor Market Information Division. 2000.<br><a href="http://www/calmis.calwnet.gov/file/COsnaps/scruzSNAP.pdf">http://www/calmis.calwnet.gov/file/COsnaps/scruzSNAP.pdf</a> , and Regional Economic Information System: 1969-1997 prepared by the Bureau of Economic Analysis, U.S. Dept. of Commerce. --Washington: The Bureau of Economic Analysis, <a href="http://govinfo.library.orst.edu/cgi-bin/reis-list?3_05-087.cac">http://govinfo.library.orst.edu/cgi-bin/reis-list?3_05-087.cac</a> . |   |                                |

## **ANALYTIC FRAMEWORK AND RESULTS**

## **SECTION 3**

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47. This section provides an overview of the framework for the analysis, a description of information sources used, and a discussion of potential economic costs and benefits associated with the proposed designation of critical habitat for the Zayante Band-winged Grasshopper.

### **FRAMEWORK FOR ANALYSIS**

48. This economic analysis examines the potential impacts of modifications to specific land uses or activities within those areas designated as critical habitat for the grasshopper. The analysis evaluates impacts in a "with" critical habitat designation versus a "without" critical habitat designation framework, measuring the net change in economic activity attributable to the critical habitat proposal. The "without" critical habitat designation scenario, which represents the baseline for analysis, includes all protection already accorded to the grasshopper under Federal laws, such as the National Environmental Policy Act, and State laws, such as the California Environmental Quality Act. The difference between the two scenarios is a measurement of the net change in economic activity that may result from the designation of critical habitat for the grasshopper. The listing of the grasshopper is the most significant aspect of baseline protection, as it provides the most protections since it makes it illegal for any person to "take" a listed species, which is defined by the Act to mean harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct.

### **Categories of Economic Impacts**

49. The focus of this economic analysis is to determine the incremental costs and benefits to land uses and activities from the designation of critical habitat that are above and beyond those that result from existing Federal, State, and local laws. This analysis considers any incremental costs and benefits resulting from the proposed critical habitat designation. Exhibit 3-1 outlines the categories of costs and benefits considered in this analysis.

| <b>Exhibit 3-1</b>  |   |  |
|---|---|--|
| <b>POTENTIAL ECONOMIC IMPACTS DUE TO CRITICAL HABITAT</b> |   |  |
|   | <b>Categories of Costs and Benefits</b>   | <b>Examples</b>  |
| <b>Costs</b>  | Costs associated with section 7 consultations:<br>C new consultations<br>C reinitiated consultations<br>C consultations involving greater level of effort | Administrative costs (e.g., phone calls, letter writing, meetings, travel time) and specialist consultant costs (e.g., biologists, surveyors or legal counsel).  |
|   | Costs of modifications to projects, activities and land uses.   | Opportunity costs associated with seasonal change of project (e.g., activity limited to non-breeding seasons), or the relocation/redesign of project activities.   |
|   | Costs associated with uncertainty and perceptions of critical habitat effects:<br>C changes in property values<br>C project delays<br>C legal costs       | Transitory decline in value of undeveloped properties within critical habitat, based on the public's perception that critical habitat will result in project modifications; legal suits brought against development in critical habitat areas. |
| <b>Benefits</b>   | Benefits associated with uncertainty and perceptions of critical habitat effects.   | Transitory increases in value of developed properties within and near critical habitat, based on the public's perception that critical habitat will slow development and restrict the supply of developed properties.                          |
|   | Recreational and other use benefits.  | Improvements to wildlife viewing for local residents and visitors.   |
|   | Non-use benefits.   | Existence values resulting from successful recovery of grasshopper, increased biodiversity, and ecosystem health.  |
|   | Improved Land Use Planning  | Improvements to land use planning and permitting processes (e.g., CEQA surveys) based on the availability of a priori information describing the location of critical habitat.   |

50. Potential costs associated with section 7 consultations due to proposed critical habitat include: (1) the value of time spent in conducting section 7 consultations beyond those associated with the listing of the grasshopper, and (2) modifications to land uses and activities as a result of consultations. The Service has recognized that there are approximately three different scenarios associated with the designation of critical habitat that could trigger incremental consultation costs:

- C Some consultations that have already been “completed” may need to be re-

initiated to address critical habitat (in the case of the grasshopper, no consultations have occurred since its listing, thus no re-initiation of consultations would occur);

- C Consultations taking place after critical habitat designation may take longer because critical habitat issues will need to be addressed;
- C New consultations that would not have taken place but for designation of critical habitat.

51. Critical habitat could also result in economic costs triggered by the public's perception about the impact of critical habitat on particular parcels subject to the designation. Public perception that critical habitat results in project modifications could lead to real reductions in property values and increased costs to landowners. For example, a perception held by potential buyers that crime is high in a given neighborhood, though the area may actually be safe, can negatively influence the value of individual properties in the neighborhood. Often, a single event or series of events (for example, the publication of a newspaper article or a succession of crimes) create a change in public attitudes which in turn cause a change in the value of property. As more information on actual neighborhood attributes becomes available to the market over a period of time, the influence of the public's initial perception subsides. Although originating in perceived changes, a similar pattern of public attitudes about the influence of critical habitat could cause real economic effects. They may occur even in cases in which additional project modifications on land uses within critical habitat are unlikely to be imposed.
52. Uncertainty about the impacts of critical habitat also could result in costs to landowners. For example, uncertainty surrounding the definition of critical habitat could prompt some landowners to undertake steps to reduce that uncertainty, thereby incurring transaction costs. Specifically, in cases of critical habitat designation for other species, some landowners have elected to retain counsel, surveyors and other specialists to determine whether specific parcels lie within critical habitat boundaries, and/or whether the primary constituent elements are present on parcels. Thus, uncertainty over the critical habitat status of lands has the potential to create real economic losses as land owners incur costs to reduce and/or mitigate the effects of this uncertainty. Moreover, uncertainty may create delays, or in some cases, may lead to changes in land use decision-making, and may thereby result in opportunity costs.
53. In addition to considering potential economic impacts attributable to the proposed critical habitat, this analysis also considers economic benefits that may result from designation of critical habitat. Resource preservation or enhancement, which is aided by designation of critical habitat, may constitute an increase in non-recreational values provided directly by the species and indirectly by its habitat. Categories of potential benefits associated with critical habitat designation include

enhancement of wildlife viewing<sup>7</sup>, increased biodiversity and ecosystem health, and intrinsic (passive use) values. Furthermore, designation of critical habitat could potentially lead to earlier recovery of the species, thus decreasing regulatory costs associated with listing. Finally, the public's perception of the potential importance of critical habitat may result in increases in property values, just as the perception of modifications may result in property value reductions, regardless of whether critical habitat generates such impacts.

### **Methodological Approach**

54. As discussed in Section 1, critical habitat can only affect current or planned land uses where a Federal nexus is involved. Where current or future activities on State, county, municipal, or private lands involve Federal funding, Federal permitting, or other Federal involvement, section 7 consultation with the Service is required if these activities may affect a listed species or critical habitat. Activities on State, county, municipal, and private lands that do not involve a Federal nexus are not affected by the designation of critical habitat. As a result, this report assesses potential economic impacts from critical habitat by first identifying those activities that will likely involve a Federal nexus. Once probable Federal nexuses are identified, specific examples of these nexuses within the proposed critical habitat are identified and evaluated to determine the likelihood of incremental consultations and the probability of resultant project modifications or other costs or benefits. Below, the specific steps used in this methodology are described:

- C First, identify potential Federal nexuses in area of concern. Develop comprehensive list of possible nexuses on State, county, municipal, and private lands in and around proposed critical habitat for the grasshopper.
- C Second, review historical patterns for section 7 consultations in the proposed critical habitat area to determine the likelihood that nexuses are likely to result in consultations with the Service. However, as historical patterns are not totally accurate predictors of future events, also use current information and professional judgement of the Service and other Federal agency staff, regarding the likelihood of new, re-initiated, or extended incremental consultations.
- C Third, identify specific projects and activities that involve a Federal nexus in the proposed critical habitat area and will likely result in section 7 consultations with the Service, based on current and historical information.

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<sup>7</sup> Wildlife viewing value, while perhaps negligible for direct viewing of a species such as the grasshopper, could be substantial if habitat protection increased viewing opportunities for other more visible species as well.

- C Fourth, evaluate the probable impacts of any modifications resulting from consultation outcomes, as well as other incremental costs and benefits that may originate from the proposed designation (e.g., project delays, change in property values, enhanced recreational opportunities).

### **Information Sources**

55. The methodology outlined above relies primarily on input and information from the Service staff. Additionally, public comments pertaining to economic impacts of critical habitat designation were examined in this analysis. Where necessary and appropriate, key individuals in State and local government were contacted to determine if specific Federal nexuses existed in their areas.

### **POTENTIAL FEDERAL NEXUSES WITHIN CRITICAL HABITAT**

56. As outlined above, the first step in assessing potential impacts due to critical habitat for the Zayante band-winged grasshopper involves identification of the potential Federal nexuses within the affected area. Potential Federal nexuses within the proposed critical habitat are identified based on guidance from staff of the Service in Ventura, California. Both current and future nexuses potentially occurring within critical habitat for the grasshopper are identified, in order to develop a comprehensive list of all activities in the affected area that require Federal involvement in some form.
57. As the second step in assessing potential impacts, land ownership within the proposed critical habitat is reviewed to identify potential nexuses given major land ownership categories. Proposed critical habitat for the grasshopper is comprised almost exclusively of private land. According to the Service, 94.2 percent of proposed critical habitat for the grasshopper is privately owned and the rest is State or local government land. No Federal land exists within the proposed critical habitat area for the grasshopper. As virtually all of the land proposed as critical habitat for the grasshopper is privately owned, this analysis focuses on Federal nexuses for activities on the private and State and local government lands proposed as critical habitat for the grasshopper.
58. Exhibit 3-2 identifies Federal agencies with possible nexuses in the proposed critical habitat, describes the individual nexuses, and shows whether the specific nexuses have historically resulted in section 7 consultations. This analysis focuses on identifying specific land use activities in the affected areas that are most likely to result in section 7 consultation.
59. Having identified all potential nexuses within the proposed critical habitat, the analysis then focuses on identifying potential consultations and modifications to land use activities. Specific examples of activities involving a Federal nexus and requiring consultation with the Service are discussed. While the analysis focuses on those nexuses most likely to result in section 7 consultation, this analysis recognizes the possibility that consultations might occur for nexuses that have not

triggered consultations in the past.

| <b>Exhibit 3-2</b>   |   |   |
|--|---|---|
| <b>POTENTIAL FEDERAL NEXUSES WITHIN<br/>CRITICAL HABITAT FOR THE ZAYANTE BAND-WINGED GRASSHOPPER</b>   |   |   |
| <b>Federal Agency</b>  | <b>Potential Federal Nexus on State, Local or<br/>Private Lands</b>             | <b>Has Nexus Historically<br/>Occurred and/or<br/>Resulted in<br/>Consultation in Area?</b> |
| Federal Highway Administration   | Provision of funding for construction or improvement of State or local roadways | No  |
| Federal Housing Administration   | Provision of funding for construction and maintenance of homes.                 | No  |
| Sources: Personal communication with Biologists and Section 7 Coordinator, Ventura Fish and Wildlife Office, U.S. Fish and Wildlife Service. |   |   |

**POTENTIAL COSTS AND BENEFITS DUE TO CRITICAL HABITAT**

60. This section focuses on identifying specific costs and benefits associated with proposed designation of critical habitat for the grasshopper. In the discussion of potential costs, specific land uses and activities within proposed critical habitat for the grasshopper that involve a Federal nexus and may result in section 7 consultation are identified. The likelihood that these section 7 consultations could result in modifications to current and proposed land use activities is evaluated. This analysis assumes compliance among landowners and Federal agencies with respect to responsibilities required by section 7 of the Act.

**Critical Habitat Unit for Zayante Band-winged Grasshopper**

61. The proposed critical habitat unit is located wholly within Santa Cruz County, California. Much of the proposed unit is semi-steep terrain in the Santa Cruz Mountains. Historically, this area was one of large private land holdings. Today, it is almost entirely private lands with 1/3 to 1 acre residential lots predominating. According to Service personnel, the area is largely “built-out”, with very limited future development potential for open lands under current State and local regulations.

62. The Zayante sands (a primary constituent element for the grasshopper habitat) are reported to be some of the best sands in the world for use in glass-blowing. There are currently three active

mines within the area as well as three inactive mines that have been mined-out. In addition to glass-blowing, the sands have been mined actively for construction purposes for at least 50 years (USFWS, 1998). While the Zayante sand quarries are regulated under the California Sand Mining and Reclamation Act (SMARA), there is no obvious Federal agency nexus associated with these sand mining activities.

63. The Zayante band-winged grasshopper is endemic to Santa Cruz County, and is closely tied to a specific soil type, the Zayante sands and its associated vegetation. The proposed critical habitat is bordered by a line drawn around the major sand soils in Santa Cruz County. Because of mapping limitations, the proposed critical habitat contains small areas outside of the actual Zayante sand soils. These areas, while falling within the proposed critical habitat, are lacking in one or more of the primary constituent elements for grasshopper critical habitat detailed in the draft critical habitat rule.

#### **Potential Consultations Identified by Service Personnel**

64. Conversations with the Service personnel from the Ventura Fish and Wildlife Office identified one foreseeable specific potential Federal nexus associated with the critical habitat designation for the grasshopper. A county road (Graham Hill Road) is scheduled for widening in the future. This work would be partially funded by Federal Highway Administration monies. While the road will impact Zayante sands, the Service biologists state that other primary constituent elements (PCE) identified in the proposed critical habitat rule are missing. The Service biologist and section 7 coordinator indicated that while the administrative process for undergoing review of the proposed county road widening would be different under critical habitat designation than under only the listing requirements, the practical result (given the presumed absence of PCE's in the project area) would likely be the same. Therefore, the designation of critical habitat would not likely cause any changes in project design or minimization measures. Because section 9 of the Act does not address critical habitat, the Service cannot impose terms and conditions that address it; additionally, any measures that are reasonable and prudent to reduce the amount or extent of incidental take of the grasshopper would be provided on the basis of the listing alone as reasonable and prudent measures in a biological opinion. Project delays could occur if consultation was completed only on the grasshopper and critical habitat was subsequently designated because of the requirements regarding the initiation of consultation in the implementing regulations for section 7. However, these delays could be avoided if the lead Federal agency confers with the Service during the period when critical habitat is proposed.
65. Conversations with the Service personnel in the Ventura, California office indicate that no consultations on the grasshopper have occurred since it was listed in January of 1997. The Service also indicates that they believe few will occur in the future.

#### **Potential Economic Impact Issues Raised in Public Comments**

66. The proposed critical habitat rule for the Zayante band-winged grasshopper was published on July 7, 2000. The public comment period for this proposed rule closed on September 7, 2000. According to the Service, eight comment letters were received on the proposed rule. Of these, three comment letters directly or indirectly raised concerns regarding the potential economic impacts associated with critical habitat designation.

67. One major comment found in the letters was that small communities located within the critical habitat area for the grasshopper would face significant additional costs associated with the section 7 consultations necessitated by the habitat designation. An additional comment was that local governments would be placed at a disadvantage in competing for Federal grant monies to be used inside the critical habitat area because of the additional administrative burden this designation would place on the Federal agency involved. Specific examples of potential economic burdens listed in the comment letters included difficulty in obtaining Federal funds to be used in redevelopment of blighted commercial zones, and difficulty in obtaining Federal block grant monies to be used to help residents bring existing homes or businesses up to code, or to make them handicap accessible. The Service believes that designation of critical habitat for the grasshopper will not lead to additional economic hardship on residents and businesses within the proposed critical habitat for two reasons:

- 1) Previously developed areas within the proposed critical habitat would be exempted from section 7 consultation requirements. As noted in the proposed rule for the grasshopper critical habitat, "Areas of existing features and structures within the unit boundaries, such as buildings, roads, aqueducts, railroads, airports, and paved areas do not contain one or more of the primary constituent elements and so do not support the functions necessary to maintain the required ecosystem functions. Federal actions limited to these areas, therefore, would not trigger a section 7 consultation, unless they affect the species and/or the primary constituent elements in adjacent critical habitat (65 FR 41921)."
- 2) Most Federal agencies are very experienced with the Act requirements and, if funding activities in the proposed critical habitat area, would already be involved in communication with the Service regarding the significant number of other listed species in the area, and their relationship with any proposed project. The existence of grasshopper critical habitat in the same area would likely not significantly increase either the cost or complexity of any needed interaction with the Service.

68. Public comment letters also raised the issue of obtaining Federal highway funds for widening a heavily used local county road. The Service concurs that this project may fall within the critical habitat designation but in an area not containing the primary constituent elements. In the absence of both designated critical habitat and suitable habitat, the lead federal agency may not have even contacted the Service. With critical habitat but without the PCEs, the lead federal agency will likely

contact the Service for concurrence that the proposed critical habitat is not likely to be adversely affected. This consultation constitutes an additional burden beyond listing; the burden would exist only if planning, not in on-the-ground implementation.

69. A final issue raised in public comments concerned the possible negative impact critical habitat designation might have on property values within the unit. The Service believes there will be negligible incremental section 7 impacts associated with designation of critical habitat for the grasshopper over and above existing listing requirements associated with the grasshopper and other species. Any negative impact of the habitat designation on property values would, therefore, be due to a short term lack of information on the true incremental effects of the designation. It is not possible to predict the extent of the possible impact (if any) habitat designation would have on private property values.

#### **Additional Potential Consultations Identified**

70. Conversations with the City of Scotts Valley Planning Department identified several areas of concern regarding critical habitat designation for the grasshopper.<sup>8</sup> These concerns echoed those expressed in the public comment letters, described above. Specifically, the City of Scotts Valley receives, on average, two to three US Dept. of Transportation (DOT) grants per year associated with road and alternative transportation improvements within the city. City officials are concerned that critical habitat designation for the grasshopper will increase the costs of regulatory review associated with these projects. The types of projects typically funded by these DOT monies include addition of sidewalks and bike lanes on existing roads within the town of Scotts Valley. The Service does not currently have sufficient information on these projects to determine whether consultation would be required. However, the designation of critical habitat will not cause any changes in project design or minimization measures. Because section 9 of the Act does not address critical habitat, the Service cannot impose terms and conditions that address it; additionally, any measures that are reasonable and prudent to reduce the amount or extent of incidental take of the grasshopper would be provided on the basis of the listing alone as reasonable and prudent measures in a biological opinion. Project delays could occur if consultation was completed only on the grasshopper and critical habitat was subsequently designated because of the requirement regarding the initiation of consultation in the implementing regulations for section 7.<sup>9</sup> However, these delays could be avoided if the lead Federal agency confers with the Service during the period when critical habitat is proposed. In addition to transportation-related projects, the city of Scotts Valley is currently pursuing Federal block grant funds to partially finance the "Town Center project," a redevelopment project at the site of an

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<sup>8</sup> Personal Communication, City of Scotts Valley Planning Department, November 16, 2000.

<sup>9</sup> Personal Communication, Section 7 Coordinator, USFWS, Ventura Field Office.

abandoned local airport. City officials note, however, that due to the high number of existing listed species within the area, critical habitat designation for the grasshopper will not likely result in any additional level of federal oversight for this project beyond that imposed by the listing of the grasshopper and other species in the area.<sup>10</sup>

71. State of California, Department of Transportation (CALTRANS) personnel were contacted to determine if any additional road projects utilizing federal funding were planned within the proposed critical habitat unit. CALTRANS personnel identified the Graham Hill Road as the only roadway within the proposed critical habitat area currently scheduled for improvement.<sup>11</sup>

**Summary of Economic Impacts**

72. Exhibit 3-3 below summarizes potential economic impacts of the proposed designation. First, it indicates Federal nexuses that exist or could exist in the future in proposed critical habitat for the Zayante band-winged grasshopper. In addition, the exhibit indicates the likelihood that section 7 consultations with the Service would occur as a result of the proposed designation for the grasshopper. Finally, Exhibit 3-3 notes the likelihood that modifications or other impacts (e.g., project delays) would occur as a result of consultation with the Service.

| <b>Exhibit 3-3</b>   |   |   |   |
|--|---|---|---|
| <b>SUMMARY OF POTENTIAL CONSULTATIONS AND IMPACTS WITHIN PROPOSED CRITICAL HABITAT FOR THE ZAYANTE BAND-WINGED GRASSHOPPER</b> |   |   |   |
| <b>Federal Agency</b>  | <b>Current or Future Activities that May Require Consultation</b> | <b>Potential for New Consultations or Other Impacts</b> | <b>Potential Modifications or Impacts Due to Consultation</b> |
| Federal Highway Administration   | Funding of county road widening within critical habitat           | Moderate-High   | None - Low  |

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<sup>10</sup> Personal Communication, City of Scotts Valley Planning Department, November 16, 2000.

<sup>11</sup> Personal Communication, CALTRANS, November 16, 2000.

| <b>Exhibit 3-3</b>  |   |   |   |
|---|---|---|---|
| <b>SUMMARY OF POTENTIAL CONSULTATIONS AND IMPACTS WITHIN PROPOSED CRITICAL HABITAT FOR THE ZAYANTE BAND-WINGED GRASSHOPPER</b>  |   |   |   |
| <b>Federal Agency</b>   | <b>Current or Future Activities that May Require Consultation</b> | <b>Potential for New Consultations or Other Impacts</b> | <b>Potential Modifications or Impacts Due to Consultation</b> |
| Federal Housing Administration  | Provide funding for construction and maintenance of homes         | Low   | None-Low  |
| Sources: Information in table based on personal communication with the following: Biologist, USFWS Ventura Office, Section 7 Coordinator, USFWS Ventura Office. All communication conducted in September 2000 |   |   |   |

**ADDITIONAL IMPACTS DUE TO PROPOSED CRITICAL HABITAT**

73. This section considers additional economic and socioeconomic impacts of designating critical habitat for the grasshopper. Specifically, this section addresses:
- C Potential impacts to small businesses;
  - C Potential impacts associated with project delays; and
  - C Potential impacts on property values attributable to public perception and/or uncertainty about proposed critical habitat.

**Potential Impacts to Small Businesses**

74. Under the Regulatory Flexibility Act (as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996) whenever a Federal agency is required to publish a notice of rulemaking for any proposed or final rule, it must prepare and make available for public comment a regulatory flexibility analysis that describes the effect of the rule on small entities (i.e., small businesses, small organizations, and small government jurisdictions).<sup>12</sup> However, no regulatory flexibility analysis is required if the head of an agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. SBREFA amended the Regulatory Flexibility Act to require Federal agencies to provide a statement of the factual basis for certifying that a rule will not have a significant economic impact on a substantial number of small entities.

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<sup>12</sup> 5 U.S.C. 601 et.seq.

75. As proposed critical habitat for the grasshopper consists primarily of private lands that have been previously developed, the potential for significant future development of undisturbed land by small businesses would be low. As noted in the proposed rule for the grasshopper critical habitat, “Areas of existing features and structures within the unit boundaries, such as buildings, roads, aqueducts, railroads, airports, and paved areas do not contain one or more of the primary constituent elements and do not support the functions necessary to maintain the required ecosystem functions. Federal actions limited to these areas, therefore, would not trigger a section 7 consultation, unless they affect the species and/or the primary constituent elements in adjacent critical habitat” (65 FR 41921). Because existing business development is, by definition, largely exempt from the burden of section 7 consultations on the grasshopper, it is unlikely that small businesses within the critical habitat area will be significantly impacted by the proposed critical habitat designation.

### **Potential Impacts Associated with Project Delays and Property Values**

76. The proposed critical habitat for the grasshopper is in an area with a relatively high level of existing regulatory control associated with listing of other endangered or threatened species, as well as requirements under CEQA. Discussions with the Service staff did not yield evidence of any commercial or residential zones containing major construction projects that could require lengthy section 7 consultation as a result of critical habitat designation for the grasshopper. Similarly, the Service staff did not identify any residential areas within the proposed critical habitat units where property values could be impacted due to uncertainty associated with, or public perceptions of, the critical habitat designation.

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